ABSTRACT

[0041] A robotic positioning system that cooperates with a sensing system to correct robot motion is provided. The sensing system is decoupled from the sensors used conventionally to control the robot's motion, thereby providing repeatable detection of the robot's true position. In one embodiment, the positioning system includes a robot, a controller, a motor sensor and a decoupled sensor. The robot has at least one motor for manipulating a linkage controlling the displacement of a substrate support coupled thereto. The motor sensor is provides the controller with motor actuation information utilized to move the substrate support. The decoupled sensor provides information indicative of the true position the substrate support that may be utilized to correct the robot's motion.